

# Alcohol and the College Student Brain



## The Numbers

**2 in 5**

Number of college students in the U.S. who drink excessively<sup>1</sup>

**1 in 4**

Number of college students who say that alcohol interferes with their academic performance<sup>2</sup>

Excessive drinking makes it harder for students to take advantage of all that college has to offer, and can impede their progress toward reaching their goals.<sup>3</sup>

Alcohol harms brain structures that carry out learning, memory, and information processing tasks.<sup>4,5</sup>



Hangovers cloud a student's ability to think and concentrate, so performance suffers both in and out of class.<sup>6</sup>



Getting drunk early in life "hijacks" the process of brain development. One possible result? A lifelong vulnerability to addiction.<sup>4,5</sup>

## **How much is too much?**

All underage drinking should be discouraged. "Binge" drinking is defined as 4 drinks for women or 5 drinks for men in about 2 hours.<sup>7</sup>

## **Brains are still "under construction" until age 25.**

The earlier in life alcohol use begins, the greater the likelihood of problems.<sup>4,5</sup> The teenage years are a critical window when the brain is more sensitive to alcohol and drugs.<sup>4</sup> Researchers believe that early exposure to alcohol during this critical window of brain construction sets the stage for changes in the brain that might result in problems with memory and learning, and also make a young person more vulnerable to the addictive properties of drugs and alcohol later in life.<sup>4,5</sup>

Learn what you can do to reduce excessive drinking on your college campus by visiting [www.marylandcollaborative.org](http://www.marylandcollaborative.org)



THE MARYLAND COLLABORATIVE  
TO REDUCE COLLEGE DRINKING AND RELATED PROBLEMS

# References

1. Substance Abuse and Mental Health Services Administration. *Results from the 2012 National Survey on Drug Use and Health: Detailed tables*. Rockville, MD: United States Department of Health and Human Services, Office of Applied Studies; 2013.
2. National Institute on Alcohol Abuse and Alcoholism. *A call to action: Changing the culture of drinking at U.S. colleges*. Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism; 2002.
3. Arria AM, Caldeira KM, Bugbee BA, Vincent KB, O'Grady KE. *The academic opportunity costs of substance use during college*. College Park, MD: Center on Young Adult Health and Development; 2013. Available at: [www.cls.umd.edu/docs/AcadOppCosts.pdf](http://www.cls.umd.edu/docs/AcadOppCosts.pdf).
4. Winters KC, Arria AM. Adolescent brain development and drugs. *The Prevention Researcher*. 2011;18(2):21-24.
5. Silveri MM. Adolescent brain development and underage drinking in the United States: Identifying risks of alcohol use in college populations. *Harvard Review of Psychiatry*. 2012;20(4):189-200.
6. Brown SA, Tapert SF. Adolescence and the trajectory of alcohol use: Basic to clinical studies. *Annals of the New York Academy of Sciences*. 2004;1021:234-244.
7. Centers for Disease Control and Prevention. *Fact sheet: Binge drinking*. Atlanta, GA: Centers for Disease Control and Prevention; 2014. Available at: [www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm](http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm).

Learn what you can do to reduce excessive drinking on your college campus by visiting  
[www.marylandcollaborative.org](http://www.marylandcollaborative.org)